/ 1 2 UNREADABLE QUARTERLY DATA FILE

ETS could not process the quarterly report file due to a serious file or data format problem. Possible causes include a corrupted or blank data file, an invalid file type, or unreadable data present at the beginning of a data record. Check your file, correct it if necessary, and resubmit the report to EPA. If the problem persists contact EPA's Acid Rain Division, especially if you are attempting to electronically submit the file to the EPA mainframe.

/ 2 2 INVALID RECORD FORMAT FOR RECORD TYPE

The record does not match the EDR format. Ensure that the fields are the correct length and data type (character, integer, or decimal).

/ 3 2 INVALID DATE OR HOUR IN QUARTERLY DATA FILE RECORD

A value exceeded the acceptable limits for date or time. Either the date lies outside the quarter indicated in the RT 100 or the month is greater than 12, the day is greater than 31, or the hour is greater than 23.

/ 12 1 INVALID UNIT ID, STACK OR PIPE ID

An ID reported for a unit, stack or pipe may be invalid. Ensure all IDs are left-justified in the appropriate field. Ensure unit IDs match those contained in NADB, or that all reported unit, stack and pipe IDs match those defined in the Monitoring Plan, including any required prefix for the stack and pipe IDs (CS, MS, MP, or CP). This error may also occur if the unit, stack, or pipe ID reported in RT 301 does not match the unit, stack, or pipe ID used to report emissions or other data in the file. An invalid unit, stack or pipe ID is a fundamental problem and may cause other errors to occur.

/ 14 3 MONITORING SYSTEM ID NOT FOUND IN EPA MONITORING PLAN

The monitoring system ID used to report data was not found in EPA's monitoring plan database. To identify the problem, compare the reported system ID to system IDs identified in the monitoring plan submitted to EPA. An invalid system ID may also cause other errors to occur.

/ 15 2 SO2 EMISSIONS FROM QUARTERLY AND HOURLY RECORDS NOT EQUAL

Quarterly SO2 mass emissions calculated from RT 31x do not match the quarterly value in RT 301 (each hourly value was weighted either by the unit operating or fuel usage time for the hour, all hourly values were then summed and the result then converted to tons and compared against the value reported in RT 301). A difference of more than 5 tons and 5% is indicated. Please review the DAHS calculation.

This discrepancy may occur if an incorrect operating or fuel usage time was reported in RT 300, 302, or 303, or if a RT 300 is missing. An incorrect unit or stack ID reported in RT 31x may also cause this discrepancy.

/ 16 2 NOX RATES FROM QUARTERLY AND HOURLY RECORDS NOT EQUAL

The NOx emission rate calculated from the hourly data does not equal the quarterly value reported in RT 301. The hourly value is calculated by summing the NOx rate values reported in RTs 320, 323 and 324 and dividing by the number of these records, in accordance with equation F-9 from Part 75. A difference of more than 0.01 lb/mmBtu and 5% is indicated. Please review the DAHS calculation.

/ 17 2 CO2 EMISSIONS FROM QUARTERLY AND HOURLY RECORDS NOT EQUAL

The CO2 mass emissions calculated from the hourly data do not equal the quarterly value reported in RT 301. The hourly value is calculated by weighting the CO2 mass value reported in RT 330 by the operating time, summing these values, and adding CO2 mass values reported in RT 331. A difference of more than 200 tons and 3% is indicated. Please review the DAHS calculation.

/ 18 2 HEAT INPUT FROM QUARTERLY AND HOURLY RECORDS NOT EQUAL

Quarterly heat input calculated from RT 300's does not match the value reported in RT 301 (each hourly value was weighted by the unit operating time for the hour, all hourly values were then summed and compared against the quarterly total reported in RT 301). A difference of more than 1000 mmBtu and 1% is indicated. Review the DAHS calculation.

/ 20 2 HOURLY SO2 EMISSIONS RECORD NOT FOUND FOR OPERATING HOUR

For an hour in which the unit operated, as identified by a non-zero operating time in RT 300, there was no SO2 mass emissions record (RT 310, 313, or 314) present.

/ 21 2 MULTIPLE RT301s/RT307s FOR THE SAME UNIT, STACK OR PIPE

This file contains more than one RT 301 and/or RT 307 for a Unit/Stack/Pipe. A file should contain one and only one summary emissions record for each Unit/Stack/Pipe identified in RTs 502, 503, and/or 504 of the monitoring plan.

/ 22 2 WARNING: ANNUAL SO2 EMISSIONS FOR THIS UNIT ARE HIGH

The cumulative annual SO2 emissions reported in the 301 record for this unit/stack are significantly higher than the average for all sources. This warning is intended to help you diagnose a possible reporting problem. If these are the actual SO2 emissions, please disregard this message.

/ 23 2 WARNING: ANNUAL AVERAGE NOX RATE FOR THIS UNIT IS HIGH

The cumulative annual NOx emission rate reported in the 301 record for this unit is significantly higher than the average for all sources. This warning message is intended to help you diagnose a possible reporting problem. If this is the actual NOx rate, please disregard this message.

/ 30 2 NO TYPE 502 RECORD FOUND FOR A TYPE 503 RECORD

The quarterly data file contains an RT 503 (stack/pipe header definition) with no associated RT 502 (unit definition) and/or RT 504 (unit information). The quarterly data file must contain a RT 502 or RT 504 for each unit identified in each RT 503.

/ 31 2 NO TYPE 502 OR 503 RECORD FOUND FOR A TYPE 510 RECORD

An RT 510 was reported for a unit, stack, or pipe that is not identified in RTs 502 or 503. The quarterly data file must contain a RT 502 for each unit reported in the file and a RT 503 for each stack and associated unit reported in the file.

/ 32 2 SO2 COMPONENT NOT FOUND FOR PRIMARY SO2 MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor SO2 at the indicated unit/stack. However, there was no RT 510 found listing the analyzer (component type code = "SO2") as a component of the primary monitoring system.

/ 33 2 DAHS COMPONENT NOT FOUND FOR PRIMARY SO2 MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor SO2 at the indicated unit/stack. However, there was no RT 510 found listing the data acquisition and handling system (component type code = "DAHS") as a component of the primary monitoring system.

/ 34 2 SO2 COMPONENT NOT FOUND FOR REDUNDANT BACKUP SO2 MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor SO2 at the indicated unit/stack. However, there was no RT 510 found listing the analyzer (component type code = "SO2") as a component of the redundant backup monitoring system.

/ 35 2 DAHS COMPONENT NOT FOUND FOR REDUNDANT BACKUP SO2 MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor SO2 at the indicated unit/stack. However, there was no RT 510 found listing the data acquisition and handling system (component type code = "DAHS") as a component of the redundant backup monitoring system.

/ 36 2 APPROPRIATE TYPE 510 RECORD NOT FOUND FOR APPENDIX D UNIT

According to the RT 502 in the quarterly data file, Appendix D methods are being used to monitor SO2 at the indicated unit/stack. However, there was no RT 510 found listing the fuel flow meter (component type code = "OILM", "OILV", or "GAS") as a component of the monitoring system.

/ 37 2 DAHS COMPONENT NOT FOUND FOR APPENDIX D UNIT

According to the RT 502 in the quarterly data file, Appendix D methods are being used to monitor SO2 at the indicated unit/stack. However, there was no RT 510 found listing the data acquisition and

handling system (component type code = "DAHS") as a component of the monitoring system.

/ 38 2 CO2 OR O2 COMPONENT NOT FOUND FOR PRIMARY CO2 MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor CO2 at the indicated unit/stack. However, there was no RT 510 found listing the analyzer (component type code = "CO2" or "O2") as a component of the primary monitoring system.

/ 39 2 DAHS COMPONENT NOT FOUND FOR PRIMARY CO2 MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor CO2 at the indicated unit/stack. However, there was no RT 510 found listing the data acquisition and handling system (component type code = "DAHS") as a component of the primary monitoring system.

/ 40 2 CO2 OR O2 COMPONENT NOT FOUND FOR BACKUP CO2 MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor CO2 at the indicated unit/stack. However, there was no RT 510 found listing the analyzer (component type code = "CO2"or "O2") as a component of the redundant backup monitoring system.

/ 41 2 DAHS COMPONENT NOT FOUND FOR BACKUP CO2 MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor CO2 at the indicated unit/stack. However, there was no RT 510 found listing the data acquisition and handling system (component type code = "DAHS") as a component of the redundant backup monitoring system.

/ 42 2 NOX COMPONENT NOT FOUND FOR PRIMARY NOX MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor NOx at the indicated unit/stack. However, there was no RT 510 found listing the NOx analyzer (component type code = "NOX") as a component of the primary monitoring system.

/ 43 2 DAHS COMPONENT NOT FOUND FOR PRIMARY NOX MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor NOx at the indicated unit/stack. However, there was no RT 510 found listing the data acquisition and handling system (component type code = "DAHS") as a component of the primary monitoring system.

/ 44 2 CO2 COMPONENT NOT FOUND FOR PRIMARY NOX MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor the CO2 diluent for a NOx system at the indicated unit/stack. However, there was no RT 510 found listing the CO2 analyzer (component type code = "CO2") as a component of the primary monitoring system.

/ 45 2 O2 COMPONENT NOT FOUND FOR PRIMARY NOX MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor the O2 diluent for a NOx system at the indicated unit/stack. However, there was no RT 510 found listing the O2 analyzer (component type code = "O2") as a component of the primary monitoring system.

/ 46 2 NOX COMPONENT NOT FOUND FOR BACKUP NOX MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor NOx at the indicated unit/stack. However, there was no RT 510 found listing the NOx analyzer (component type code = "NOX") as a component of the redundant backup monitoring system.

/ 47 2 DAHS COMPONENT NOT FOUND FOR BACKUP NOX MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor NOx at the indicated unit/stack. However, there was no RT 510 found listing the data acquisition and handling system (component type code = "DAHS") as a component of the redundant backup monitoring system.

/ 48 2 CO2 COMPONENT NOT FOUND FOR BACKUP NOX MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor the CO2 diluent for a NOx system at the indicated unit/stack. However, there was no RT 510 found listing the CO2 analyzer (component type code = "CO2") as a component of the redundant backup monitoring system.

/ 49 2 O2 COMPONENT NOT FOUND FOR BACKUP NOX MONITOR

According to the RT 502 in the quarterly data file, a CEM is being used to monitor the O2 diluent for a NOx system at the indicated unit/stack. However, there was no RT 510 found listing the O2 analyzer (component type code = "O2") as a component of the redundant backup monitoring system.

/ 50 2 NO TYPE 610 RECORDS REPORTED FOR A TYPE 611 RECORD

RATA and Bias Test Results were reported in a RT 611 with no supporting test data (RT 610s). Each RT 611 must have 9 to 12 supporting RTs 610.

/ 51 2 NOT ENOUGH TYPE 610 RECORDS REPORTED FOR A TYPE 611 RECORD

RATA and Bias Test Results were reported in a RT 611 with not enough supporting test data (RT 610s). Each RT 611 must have at least 9 supporting RTs 610. Check for missing RT 610s and review each RT 610 to ensure that the reported Unit/Stack ID and System ID are the same as reported in the corresponding RT 611. Verify that the RATA run status flag is correct in each RT 610. This error can also occur when a RT 610 contains an end date and time that is after the date and time contained in the corresponding RT 611.

/ 52 2 MONITORING SYSTEM ID NOT FOUND IN MONITORING PLAN

RATA and Bias Test Results were reported in a RT 611 for a monitoring system ID that is not in EPA's monitoring plan database. If this is a new monitoring system, the revised monitoring plan information has not yet been entered into EPA's database.

/ 53 2 IDENTICAL TYPE 610 RECORDS FOUND

The file contains duplicate RATA and Bias Test Data records (RT 610). All RT 610s must be unique.

/ 54 2 CORRESPONDING TYPE 610 RECORDS HAVE THE SAME RUN NUMBER

More than one RT 610 that appears to apply to the same RATA have the same run number. If more than one RATA was conducted on the same monitoring system within a seven day period, the data file may be correct but the software is unable to discern the RATA tests.

/ 60 2 IDENTICAL TYPE 601 RECORDS FOUND

The file contains duplicate Linearity Test Data records (RT 601). All RT 601s must be unique.

/ 61 2 CORRESPONDING TYPE 601 RECORDS HAVE THE SAME DATE AND TIME

More than one RT 601 was reported for the same system and time. Linearity tests must be run at alternating calibration gas levels and it is therefore unlikely that two tests could be conducted in the same minute. If two tests were conducted in the same minute, please disregard this message.

/ 62 2 NOT ENOUGH TYPE 601 RECORDS REPORTED FOR A TYPE 602 RECORD

Quarterly Linearity Check Results were reported in a RT 602 without sufficient supporting test data (RT 601s). Each RT 602 must have at least 3 supporting RT 601s. Check for missing RT 601s and review each RT 601 to ensure that the reported Unit/Stack ID, Component ID, and System ID are the same as reported in the corresponding RT 602.

/ 70 2 RESULT IN CALIBRATION RECORD NOT CALCULATED CORRECTLY

The EPA calculated result of the daily calibration test (RT 230) does not match the value in columns 63-67. Be sure to set the alternative performance specification flag to "1" if using the R-A method.

/ 71 2 REPORTED REFERENCE VALUE TOO HIGH FOR SPAN

According to RT 230 shown below, the daily calibration test was performed at the zero level but the reference value is greater than 20% of the reported instrument span.

/ 72 2 REPORTED REFERENCE VALUE INAPPROPRIATE FOR SPAN

According to RT 230 shown below, the daily calibration test was performed at the high level but the reference value is not appropriate. For gas monitors the reference value is less than

80% of the reported instrument span. For flow monitors the reference value is not between 50 and 70% of the reported instrument span.

/ 73 2 SPAN TOO LARGE FOR ALTERNATE PERFORMANCE SPECIFICATION

The alternative performance specification (APS) flag is incorrectly set to "1" in a RT 230. The APS requirements may only be used if the unit is a low emitter with an instrument span less than 200ppm.

/ 74 2 IMPROPER CALIBRATION GAS LEVEL REPORTED

The calibration gas level reported in Record Type 230 is not "Z" (zero) or "H" (high).

/ 75 2 IMPROPER STATUS REPORTED

The status reported in Record Type 231 (Flow Daily Interference Check Results) is not "P" (Pass) or "F" (Fail).

/ 76 2 COMPONENT AND SYSTEM ID IN RT 230 DOES NOT MATCH RT 510

A daily calibration test result in RT 230 does not match any monitoring component/system identified in RT 510. All component/system IDs identified in test results must match a component/system ID in RT 510. Please ensure that your next quarterly report submission contains component/system IDs that are identified in RT 510.

/ 80 2 METHOD OF DETERMINATION CODE NOT VALID

Consult the appropriate version of the EDR Reporting Instructions for the proper Method of Determination Code and submit your next file with the correct code.

/ 90 2 RECORD TYPE 200 NOT FOUND FOR HOURLY RECORD TYPE 310

SO2 lb/hr were reported for one or more hours in which no SO2 concentration records were found. Each Record Type 310 must have a corresponding Record Type 200 reported for the same hour.

/ 91 2 RECORD TYPE 220 NOT FOUND FOR HOURLY RECORD TYPE 310

SO2 lb/hr were reported during hours in which no valid volumetric flow records were found. Each Record Type 310 must have a corresponding Record Type 220 reported for the same hour.

/ 92 2 RECORD TYPE 201 NOT FOUND FOR HOURLY RECORD TYPE 320

Data for measured NOx lb/mmBtu were reported during hours in which no valid NOx concentration records were found. Each Record Type 320 representing an hour with a measured NOx emission rate must have a corresponding Record Type 201 reported for the same hour.

/ 93 2 RECORD TYPE 210/211 NOT FOUND FOR HOURLY RECORD TYPE 320

Data for measured NOx lb/mmBtu were reported during hours in which no valid diluent concentration records were found. Each Record

Type 320 record representing an hour with a measured NOx emission rate must have a corresponding Record Type 210 or 211 reported for the same hour.

/ 94 2 RECORD TYPE 202 NOT FOUND FOR HOURLY RECORD TYPE 330

Data for CO2 tons/hr were reported during hours in which no valid CO2 concentration records were found.

/ 95 2 RECORD TYPE 220 NOT FOUND FOR HOURLY RECORD TYPE 330

Data for CO2 tons/hr were reported during hours in which no volumetric flow records were found.

/ 96 2 QUARTERLY AND ANNUAL SO2 EMISSIONS VALUES INCONSISTENT

The quarterly SO2 emissions value reported in RT 301 exceeds the cumulative annual SO2 emissions value reported in RT 301.

/ 97 2 QUARTERLY AND ANNUAL NOX EMISSION RATE VALUES INCONSISTENT

The quarterly NOx emission rate value reported in Record Type 301 for the first quarter does not equal the cumulative annual emission rate also reported in Record Type 301.

/ 98 2 QUARTERLY AND ANNUAL CO2 EMISSIONS VALUES INCONSISTENT

The quarterly CO2 emission value reported in RT 301 exceeds the cumulative annual CO2 emissions value reported in RT 301.

/101 2 FORMULA ID NOT FOUND IN EPA MONITORING PLAN

A formula ID used to report data in RTs 310, 320 or 330 was not found in EPA's monitoring plan database. To identify the problem, compare the reported formula ID to formula IDs identified in the monitoring plan submitted to EPA. This error may occur if you have recently filed a monitoring plan revision.

/102 3 NO TYPE 230 RECORDS IN FILE

The file must contain calibration test results for each CEMS for each day the monitor is used to report data. Calibration records are not required for days when the unit did not operate or if alternative estimation methods were used. Please submit your next file with the appropriate amount of calibration test results.

/103 3 NO TYPE 231 RECORDS IN FILE

The file must contain flow interference check results for each flow CEMS for each day the flow monitor is used to report data. Flow interference records are not required for days when the unit did not operate or if alternative estimation methods were used. Please submit your next file with the appropriate amount of flow interference check results.

/104 3 INVALID NUMBER OF RECORD TYPE 300S IN FILE

The number of Record Type 300s reported for each unit, stack or pipe in the file must equal the number of clock hours in the quarter or the number of ozone season clock hours in the quarter. Please submit your next file with the appropriate number of RT 300s.

/105 3 NO 500-LEVEL RECORDS IN FILE

A complete monitoring plan must be included for all unit/stack/pipe IDs reported in the file.

/106 3 NO 600-LEVEL RECORDS IN FILE

CEM Units: The file must contain quality assurance data for all CEM systems reported in the file. If you were unable to conduct the tests during this quarter, please describe the circumstances in a statement accompanying your quarterly report certification.

/107 3 INAPPROPRIATE DATA REPORTED FOR APPENDIX D

Appendix D units - Ensure the quarterly report contains one of the following record combinations:

- Record Types 302 and 313 (oil) and/or
- Record Types 303 and 314 (gas).

/110 2 DUPLICATE RECORDS EXIST FOR SAME HOUR

More than one 300-level emissions record for the same pollutant was reported for the same unit/stack for the same hour. Ensure the appropriate record types are being used for your monitoring approach.

/111 2 DUPLICATE RECORDS EXIST FOR SAME HOUR AND SYSTEM ID

This file contains Appendix D SO2 emissions data records with the same system ID for the same hour. Only one RT 302, 303, 313, or 314 should be reported for each hour for each system.

/112 2 MONITORING SYSTEM ID IS BLANK

The monitoring system ID was left blank in a RT 302, 303, 313, or 314. If this record represents substitute data, please disregard this message.

/113 2 PARAMETER IN RT 520 IS INVALID FOR HOURLY RECORD TYPE

The parameter monitored reported in RT 520 is inconsistent with the corresponding hourly emissions record based on a cross-check of the formula ID. Please check Part 70 Appendix F to ensure the correct formula and formula code is being used.

/114 2 FORMULA ID REPORTED IN HOURLY RECORD IS BLANK

All hourly emissions records must have a formula ID.

/115 2 CORRESPONDING TYPE 200 RECORD NOT FOUND FOR RT 310

While attempting to recalculate hourly SO2 mass emissions, ETS was unable to locate the RT 200 (SO2 concentration data) with the same unit/stack ID and for the same time as the RT 310.

/116 2 CORRESPONDING TYPE 220 RECORD NOT FOUND FOR RT 310

While attempting to recalculate hourly SO2 mass emissions, ETS was unable to locate the RT 220 (flow data) with the same unit/stack ID and for the same time as the RT 310. According to the formula code in EPA's monitoring plan database, flow data is needed to calculate SO2 for this unit.

/117 2 CORRESPONDING TYPE 212 RECORD NOT FOUND FOR RT 310

While attempting to recalculate hourly SO2 mass emissions, ETS was unable to locate the RT 220 (for moisture data) with the same unit/stack ID and for the same time as the RT 310. According to the formula code in EPA's monitoring plan database, moisture data is needed to calculate SO2 for this unit.

/118 2 CORRESPONDING TYPE 300 RECORD NOT FOUND FOR RT 310

While attempting to recalculate hourly SO2 mass emissions, ETS was unable to locate the RT 300 (for operating time data) with the same unit/stack ID and for the same time as the RT 310.

/119 2 FORMULA CODE IN RT 520 IS BLANK OR INVALID

The formula code field in RT 520 must contain a valid Part 75 or Part 60 equation identifier.

/120 2 REPORTED AND CALCULATED HOURLY SO2 EMISSIONS NOT EQUAL

The hourly SO2 mass emissions value that EPA calculated from the appropriate 200- level records using formula F-1, F-2, or F-23 (whichever is identified in your monitoring plan) does not match the value reported in RT 310. Please review the DAHS calculation.

/121 2 CORRESPONDING TYPE 302 RECORD NOT FOUND FOR RT 313

An RT 313 was reported with no corresponding RT 302 for the same unit/pipe and hour.

/122 2 REPORTED AND CALCULATED HOURLY SO2 EMISSIONS NOT EQUAL

The hourly SO2 mass emissions from oil calculated from RTs 302 and 313 does not equal the value reported in RT 313. Please review the DAHS calculation of equation D-2.

/123 2 CORRESPONDING TYPE 303 RECORD NOT FOUND FOR RT 314

An RT 314 was reported with no corresponding RT 303 for the same unit/pipe and hour.

/124 2 REPORTED TYPE OF GAS IS INVALID

Valid values for type of gas in Record Type 303 Start Column 56 are

"PNG" (Pipeline Natural Gas) and "OTH" (Other).

/125 2 REPORTED AND CALCULATED HOURLY SO2 EMISSIONS NOT EQUAL

The hourly SO2 mass emissions from gas calculated from RTs 303 and 314 does not equal the value reported in RT 314. Please review the DAHS calculation, ensuring the correct equation is used for "PNG" or other ("OTH") gas.

/130 2 CORRESPONDING TYPE 201 RECORD NOT FOUND FOR RT 320

While attempting to recalculate hourly NOx emission rate, ETS was unable to locate the RT 201 (NOx concentration data) with the same unit/stack ID and time as the RT 320. According to the formula code in EPA's monitoring plan database, NOx concentration data is needed to calculate NOx rates for this unit.

/131 2 CORRESPONDING TYPE 211 RECORD NOT FOUND FOR RT 320

While attempting to recalculate hourly NOx emission rate, ETS was unable to locate the RT 211 (O2 diluent data) with the same unit/stack ID and time as the RT 320. According to the formula code in EPA's monitoring plan database, O2 concentration data is needed to calculate NOx rates for this unit.

/132 2 CORRESPONDING TYPE 210 RECORD NOT FOUND FOR RT 320

While attempting to recalculate the hourly NOx emission rate, ETS was unable to locate the RT 210 (CO2 diluent data) with the same unit/stack ID and time as the RT 320. According to the formula code in EPA's monitoring plan database, CO2 concentration data is needed to calculate NOx rates for this unit.

/133 2 FORMULA CODE IN RT 520 IS BLANK OR INVALID

The formula code field in RT 520 must contain a valid Part 75 or Part 60 equation identifier.

/134 2 REPORTED AND CALCULATED HOURLY NOX RATES NOT EQUAL

The hourly NOx emission rate calculated from the appropriate 200-level records using F-5 or F-6 (whichever is identified in your monitoring plan) does not match the value reported in RT 320. Please review the DAHS calculation.

/140 2 CORRESPONDING TYPE 202 RECORD NOT FOUND FOR RT 330

While attempting to recalculate hourly CO2 mass emissions rate, ETS was unable to locate the RT 202 (CO2 concentration data) with the same unit/stack ID and time as the RT 330. According to the formula code in EPA's monitoring plan database, CO2 concentration data is needed to calculate CO2 mass for this unit.

/141 2 CORRESPONDING TYPE 220 RECORD NOT FOUND FOR RT 330

While attempting to recalculate hourly CO2 mass emissions rate, ETS was unable to locate the RT 220 (flow data) with the same

unit/stack ID and time as the RT 330. According to the formula code in EPA's monitoring plan database, flow data is needed to calculate CO2 mass for this unit.

/142 2 CORRESPONDING TYPE 212 RECORD NOT FOUND FOR RT 330

While attempting to recalculate hourly CO2 mass emissions rate, ETS was unable to locate the RT 212 (moisture data) with the same unit/stack ID and time as the RT 330. According to the formula code in EPA's monitoring plan database, moisture data is needed to calculate CO2 mass for this unit.

/143 2 FORMULA CODE IN RT 520 IS BLANK OR INVALID

The formula code field in RT 520 must contain a valid Part 75 or Part 60 equation identifier.

/144 2 REPORTED AND CALCULATED HOURLY CO2 EMISSIONS NOT EQUAL

The hourly CO2 mass emissions value that EPA calculated from the appropriate 200- level records using F-2 or F-11 (whichever is identified in your monitoring plan) does not match the value reported in RT 330.

/150 2 VALID FORMULA CODE NOT FOUND FOR HEAT INPUT IN RT 520

A formula (RT 520) with a valid formula code for heat input was not found in EPA's monitoring plan database for this unit. Valid formula IDs for heat input are F-15 through F-20.

/151 2 CORRESPONDING TYPE 220 RECORD NOT FOUND FOR RT 300

While attempting to recalculate the hourly heat input rate, ETS was unable to locate the RT 220 (flow data) with the same unit/stack ID and time as the RT 300. According to the formula code in EPA's monitoring plan database, volumetric flow is needed to calculate heat input for this unit.

/152 2 CORRESPONDING TYPE 320 RECORD NOT FOUND FOR RT 300

While attempting to recalculate the hourly heat input rate, ETS was unable to locate the RT 320 (containing F-factor data) with the same unit/stack ID and time as the RT 300. According to the formula code in EPA's monitoring plan database, the fuel factor is needed to calculate heat input for this unit.

/153 2 CORRESPONDING TYPE 210 RECORD NOT FOUND FOR RT 300

While attempting to recalculate the hourly heat input rate, ETS was unable to locate the RT 210 (CO2 concentration data) with the same unit/stack ID and time as the RT 300. According to the formula code in EPA's monitoring plan database, CO2 concentration is needed to calculate heat input for this unit.

/154 2 CORRESPONDING TYPE 211 RECORD NOT FOUND FOR RT 300

While attempting to recalculate the hourly heat input rate, ETS was

unable to locate the RT 211 (O2 concentration data) with the same unit/stack ID and time as the RT 300. According to the formula code in EPA's monitoring plan database, O2 concentration is needed to calculate heat input for this unit.

/155 2 CORRESPONDING TYPE 212 RECORD NOT FOUND FOR RT 300

While attempting to recalculate the hourly heat input rate, ETS was unable to locate the RT 212 (moisture data) with the same unit/stack ID and time as the RT 300. According to the formula code in EPA's monitoring plan database, moisture is needed to calculate heat input for this unit.

/156 2 CORRESPONDING TYPE 302 RECORD NOT FOUND FOR RT 300

While attempting to recalculate the hourly heat input rate, ETS was unable to locate the RT 302 (oil flow data) with the same unit/stack ID and time as the RT 300. According to the formula code in EPA's monitoring plan database, oil data is needed to calculate heat input for this unit.

/157 2 CORRESPONDING TYPE 303 RECORD NOT FOUND FOR RT 300

While attempting to recalculate the hourly heat input rate, ETS was unable to locate the RT 303 (gas flow data) with the same unit/stack ID and time as the RT 300. According to the formula code in EPA's monitoring plan database, gas data is needed to calculate heat input for this unit.

/158 2 REPORTED AND CALCULATED HOURLY HEAT INPUT NOT EQUAL

The hourly heat input rate that EPA calculated using formula F-15, F-16, F-17, or F-18 (whichever is identified in your monitoring plan) does not match the value reported in RT 300. Please review the DAHS calculation. Please note that ETS used the F-factor reported in RT 320 for this recalculation. If this is not appropriate for this unit, please disregard this message.

/159 2 REPORTED AND CALCULATED HOURLY HEAT INPUT NOT EQUAL

The hourly heat input rate from oil calculated by EPA using equation F-19 does not match the value reported in Record Type 302 Start Column 45. Please review the DAHS calculation.

/160 2 REPORTED AND CALCULATED HOURLY HEAT INPUT NOT EQUAL

The hourly heat input rate from oil or gas calculated by EPA using equation F-19 or F-20 does not match the value reported in RT 302 column 45 or RT 303 column 45. Please review the DAHS calculation.

/170 2 IMPROPER BIAS ADJUSTMENT FACTOR APPLIED FOR SO2 SYSTEM

The bias adjustment factor applied in the indicated SO2 concentration record is inconsistent with that used for other records for the same system and/or Bias Test Results for the monitoring system reported in RT 611.

/171 2 IMPROPER BIAS ADJUSTMENT FACTOR APPLIED FOR FLOW SYSTEM

The bias adjustment factor applied in the indicated flow record is inconsistent with that used for other records for the same system and/or Bias Test Results for the monitoring system reported in RT 611.

/172 2 IMPROPER BIAS ADJUSTMENT FACTOR APPLIED FOR NOX SYSTEM

The bias adjustment factor applied in the indicated NOx rate record is inconsistent with that used for other records for the same system and/or Bias Test Results for the monitoring system reported in RT 611.

/173 2 INVALID BIAS ADJUSTMENT FACTOR USED FOR SO2 SYSTEM

A bias adjustment factor (BAF) of less than 1.0 was applied to the measured data to calculate the bias adjusted value. All BAFs must be equal to or greater than one.

/174 2 INVALID BIAS ADJUSTMENT FACTOR USED FOR FLOW SYSTEM

A bias adjustment factor (BAF) of less than 1.0 was applied to the measured data to calculate the bias adjusted value. All BAFs must be equal to or greater than one.

/175 2 INVALID BIAS ADJUSTMENT FACTOR USED FOR NOX SYSTEM

A bias adjustment factor (BAF) of less than 1.0 was applied to the measured data to calculate the bias adjusted value. All BAFs must be equal to or greater than one.

/180 2 UNADJUSTED SO2 EXCEEDS MAXIMUM POTENTIAL CONCENTRATION

The reported SO2 concentration (RT200) is greater than the maximum potential concentration contained in EPA's monitoring plan database for this unit/stack.

/181 2 NOX CONCENTRATION EXCEEDS MAXIMUM POTENTIAL CONCENTRATION

The reported NOx concentration (RT201) is greater than the maximum potential concentration contained in either RT 530 or RT 531 for this unit/stack.

/182 2 CO2 CONCENTRATION EXCEEDS MAXIMUM POTENTIAL CONCENTRATION

The reported CO2 concentration is greater than the maximum potential concentration indicated in RT 530 for this unit/stack.

/190 2 NO HOURLY SO2 RECORDS

There are no hourly SO2 records reported for the stack/unit/pipe ID identified below. For sources affected by the Acid Rain Program, a record type 310, 302/313, or 303/314 must be reported for each hour of unit operation. Please ensure that the required hourly SO2 records are present in your next quarterly submission.

/191 2 NO HOURLY NOX RATE RECORDS

There are no hourly NOx rate records reported in the quarterly date file. For sources affected by the Acid Rain Program, a record type 320, 323, or 324 must be reported for each hour of unit operation. Please ensure that the required hourly NOx Rate records are present in your next quarterly submission.

/192 2 NO HOURLY CO2 RECORDS

There are no hourly CO2 records reported for the stack/unit/pipe ID identified below. For sources affected by the Acid Rain Program, a record type 330 must be reported for each hour of unit operation or a 331 must be reported for each day of unit operation. Please ensure that the required hourly CO2 records are present in your next quarterly submission.

/193 2 NO HOURLY HEAT INPUT REPORTED IN RECORD TYPE 300

No hourly heat input was reported in the RT 300 for an hour during which the Stack/Unit/Pipe was operating (operating time reported in RT 300 columns 18-21 is greater than 0.25). Ensure that the operating time is correct for the hour. Disregard this message if the data correctly reflect startup or shutdown conditions, otherwise ensure that the correct operating time and/or heat input data are reported.

/194 2 NO RECORD TYPE 300

There are no RT 300s reported in this file. A RT 300, containing heat input, must be reported for each hour of unit operation, except for units that qualify as a low mass emitter (RT 360). Please ensure that your next submission contains a RT 300 for each clock hour in the quarter.

/200 2 TYPE 502 OR 504 RECORD REPORTED FOR A STACK OR PIPE

Do not report RT 502 or RT 504 to define a stack or pipe. Record Type 502 (Unit Definition Table) and RT 504 (Unit Information) are only used to define a unit. To define a common, multiple, or complex stack or pipe configuration, use one or more RT 503s (Stack/Pipe Definition Table).

/201 2 TYPE 503 RECORD REPORTED FOR A UNIT

Do not report RT 503 to define a unit. Record Type 503 (Stack/ Pipe Definition Table) is only used to define a common, multiple, or complex stack or pipe configuration. Use RT 502 (Unit Definition Table) or RT 504 (Unit Information) to define a unit. For a simple configuration (a unit with a single stack or pipe), do not report RT 503.

/202 2 PRIMARY SO2 MONITOR NOT FOUND FOR SO2 CEMS UNIT

RT 502 column 75 indicates the use of an SO2 CEM system at this unit. The RT 510 data for this unit, however, does not contain a primary SO2 system. For each unit using SO2 CEMS there must be at

least one primary ${\rm SO2}$ CEM system in the quarterly data file ${\rm 510}$ records.

/203 2 SO2 MONITOR NOT FOUND FOR UNIT REPORTING USE OF SO2 CEMS

RT 502 column 75 indicates the use of an SO2 CEM system at this unit. The RT 510 data for this unit, however, does not contain a primary SO2 system for the unit or valid unit-stack association in RT 503 where the monitor might be located. For each unit or associated stack using SO2 CEMS there must be at least one primary SO2 CEM system in the quarterly data file 510 records.

/204 2 PRIMARY SO2 MONITOR NOT FOUND FOR SO2 CEMS STACK

The monitoring plan indicates the use of an SO2 CEM system at this stack. The RT 510 data for this stack, however, does not contain a primary SO2 system. For each stack using SO2 CEMS there must be at least one primary SO2 CEM system in the quarterly data file 510 records.

/205 2 SO2 MONITOR NOT FOUND FOR STACK REPORTING USE OF SO2 CEMS

The monitoring plan indicates the use of an SO2 CEM system at this stack. The RT 510 data for this stack, however, does not contain a primary SO2 system. For each unit or associated stack using SO2 CEMS there must be at least one primary SO2 CEM system in the quarterly data file 510 records.

/206 2 EXTRANEOUS SO2 SYSTEM FOUND FOR AN APPENDIX D UNIT

The record type 502 information in the file for this unit indicates the use of Appendix D methods for SO2 estimation. There is an SO2 system reported in the RT 510s that is inconsistent with this approach. Appendix D units should have only GAS, OILM, or OILV as the parameter monitored in column 17 for SO2 systems.

/207 2 EXTRANEOUS SO2 SYSTEM FOUND FOR AN APPENDIX D STACK

The record type 502 information in the file for this unit/stack combination indicates the use of Appendix D methods for SO2 estimation. There is an SO2 system reported in the RT 510s that is inconsistent with this approach. Appendix D units/stacks should have only GAS, OILM, or OILV as the parameter monitored in column 17 for SO2 systems.

/208 2 PRIMARY OILM OR OILV SYSTEM NOT FOUND FOR OIL UNIT

RT 502 column 75 indicates the use of Appendix D oil methods at this unit. The RT 510 data for this unit, however, does not contain a primary OILM or OILV system. For each unit using Appendix D estimation procedures there must be at least one primary oil system in the quarterly data file 510 records.

/209 2 OILM OR OILV SYSTEM NOT FOUND FOR OIL UNIT

RT 502 column 75 indicates the use of Appendix D oil methods at this unit. The RT 510 data for this unit, however, does not contain a

primary OILM or OILV system for the unit or a valid unit-pipe association in RT 503 where the monitor might be located. For each unit or associated pipe using Appendix D estimation procedures there must be at least one primary oil system in the quarterly data file 510 records.

/210 2 PRIMARY OILM OR OILV SYSTEM NOT FOUND FOR OIL PIPE

RT 502 column 75 indicates the use of Appendix D oil methods at this unit. The RT 510 data, however, does not contain a primary OILM or OILV system for the pipe associated with this unit. For each unit/pipe using Appendix D estimation procedures there must be at least one primary oil system in the quarterly data 510 records.

/211 2 OILM OR OILV SYSTEM NOT FOUND FOR OIL PIPE

RT 502 column 75 indicates the use of Appendix D oil methods at this stack. The RT 510 data for the pipe associated with the unit, however, does not contain a primary OILM or OILV system. For each unit or associated pipe using Appendix D estimation procedures there must be at least one primary oil system in the quarterly data file 510 records.

/212 2 PRIMARY GAS SYSTEM NOT FOUND FOR GAS UNIT

RT 502 column 75 indicates the use of Appendix D gas methods at this unit. The RT 510 data for this unit, however, does not contain a primary GAS system. For each unit using Appendix D estimation procedures there must be at least one primary gas system in the quarterly data file 510 records.

/213 2 GAS SYSTEM NOT FOUND FOR GAS UNIT

RT 502 column 75 indicates the use of Appendix D gas methods at this unit. The RT 510 data for this unit, however, does not contain a primary GAS system for the unit or a valid unit-pipe association in RT 503 where the monitor might be located. For each unit or associated pipe using Appendix D estimation procedures there must be at least one primary gas system in the quarterly data file 510 records.

/214 2 PRIMARY GAS SYSTEM NOT FOUND FOR GAS PIPE

RT 502 column 75 indicates the use of Appendix D gas methods at this unit. The RT 510 data, however, does not contain a primary GAS system for the pipe associated with this unit. For each unit/pipe using Appendix D estimation procedures there must be at least one primary gas system in the quarterly data 510 records.

/215 2 GAS SYSTEM NOT FOUND FOR GAS PIPE

RT 502 column 75 indicates the use of Appendix D gas methods at this unit. The RT 510 data for the pipe associated with the unit, however, does not contain a primary GAS system. For each unit or associated pipe using Appendix D estimation procedures there must be at least one primary gas system in the quarterly data file 510 records.

/216 2 SO2 COMPONENT NOT FOUND FOR SO2 SYSTEM

The monitoring plan data (RT 510) data in this file contains an SO2 system for the indicated unit. The file does not, however, contain an SO2 analyzer component. All SO2 systems must contain a RT 510 with a component type code of SO2. If you are monitoring with an EPA approved special combination of monitoring approaches, please disregard this message.

/217 2 FLOW COMPONENT NOT FOUND FOR FLOW SYSTEM

The monitoring plan data (RT 510) in this file contains a flow system for the indicated unit or stack. The file does not, however, contain a flow component. All flow systems must contain a RT 510 with a component type code of FLOW.

/218 2 EXPECTED COMPONENTS NOT FOUND FOR GAS SYSTEM

The monitoring plan data (RT 510) in this file contains a gas flow system for the indicated unit or stack. The file does not, however, contain a GFFM component or a combination of DP, PRES, and TEMP components. All gas fuel flow systems must contain one of the component options listed.

/219 2 OFFM COMPONENT NOT FOUND FOR OILV OR OILM SYSTEM

The monitoring plan data (RT 510) in this file contains an OILM or OILV fuel flow system for the indicated unit. The file does not, however, contain an OFFM component. All oil fuel flow systems must contain a RT 510 with a component type code of OFFM. The component/system ID for the OFFM component should be used to report hourly fuel flow rate in RT 302.

/220 2 DAHS COMPONENT NOT FOUND FOR MONITORING SYSTEM

The monitoring plan data (RT 510) data in this file does not contain a DAHS (or DAS) component for the indicated system. All monitoring systems are required to list the DAHS as a component in the RT 510s.

/221 2 SYSTEMS PARAMETERS NOT CONSISTENT FOR SAME SYSTEM ID

The monitoring plan records (RT 510s) for the indicated system ID contain more than one system parameter monitored value in column 17. All components within the same system ID reported in the RT 510s must have the same system parameter monitored.

/222 2 PRIMARY/BACKUP STATUS NOT CONSISTENT FOR SAME SYSTEM ID

The monitoring plan records (RT 510s) for the indicated system ID contain more than one primary/backup designation value in column 21. All components within the same system ID reported in the RT 510s must have the same primary/backup designation.

/223 2 BLANK FORMULA ID FOUND IN RECORD TYPE 520

The file contains a RT 520 with a blank formula ID. All formulas must contain a valid formula ID.

/224 2 INVALID FORMULA ID FOUND IN RECORD TYPE 520

The file contains a RT 520 with an invalid formula ID. All formula IDs must consist of three alpha-numeric characters and must contain no blanks.

/225 2 BLANK COMPONENT ID FOUND IN RECORD TYPE 510

The file contains a RT 510 with a blank component ID. All RT 510s must contain a valid three-character component ID.

/226 2 INVALID COMPONENT ID FOUND IN RECORD TYPE 510

The file contains a RT 510 with an invalid component ID. All RT 510s must contain a valid three-character component ID.

/227 2 BLANK SYSTEM ID FOUND IN RECORD TYPE 510

The file contains a RT 510 with a blank system ID. All RT 510s must contain a valid three character component ID.

/228 2 INVALID SYSTEM ID FOUND IN RECORD TYPE 510

The file contains a RT 510 with an invalid system ID. All system IDs must consist of three alpha-numeric characters and must contain no blanks.

/230 2 OZONE SEASON NOX FROM HOURLY AND CUMULATIVE RECORDS NOT EQUAL

The total NOx Mass Emissions calculated from the hourly data does not equal the Cumulative Ozone Season value reported in RT 307. The hourly value is calculated by summing the Total NOx Mass values reported in RT 328 and dividing by 2000 to convert to tons. For the 2nd quarter, the hourly values starting with the first hour of the first day of May to the end of the quarter were used. A difference of more than 5 tons and 5% is indicated.

/231 2 REPORTING PERIOD NOX FROM HOURLY AND CUMULATIVE RECORDS NOT EQUAL

The total NOx Mass Emissions calculated from the hourly data does not equal the Reporting Period value reported reported in RT 307. The hourly value is calculated by summing the Total NOx Mass values reported in RT 328 and dividing by 2000 to convert to tons. A difference of more than 5 tons and 5% is indicated.

/232 2 HEAT INPUT FROM OZONE SEASON AND HOURLY RECORDS NOT EQUAL

Ozone Season heat input from RT 307 does not match the value calculated from RT 300 (each hourly value for the ozone season was weighted by unit operating time for all hours, all hourly values were then summed and compared against the Ozone Season total reported in RT 307). A difference of more than 1000 mmBtu and 1% is indicated. Review the DAHS calculations.

/233 2 HEAT INPUT FROM HOURLY AND REPORTING PERIOD RECORDS NOT EQUAL

The Reporting Period Heat Input calculated from the hourly records (RT 300) does not match the Reporting Period value reported in RT 307. Each hourly value was weighted by unit operating time for each hour, then summed and compared to the Reporting Period value reported in RT 307. A difference of more than 1000 mmBtu and 1% is indicated.

/234 2 UNIT IN RT 504 WITH NO ASSOCIATED PARAMETER IN RT 585

A unit ID reported in the RT 504 does not have a corresponding RT 585 for NOXM or NOXR. NOx Budget Program sources are required to report a RT 585 for each unit ID and corresponding parameter. Ensure that your next quarterly submission contains a RT 585 with the appropriate unit ID and parameter.

/235 2 UNIT IN RT 504 WITH NO ASSOCIATED FUEL TYPE IN RT 587

The quarterly data file either did not contain at least RT 587 for each unit identified in RT 504 or the appropriate fuel type was not included in RT 587. The appropriate fuel types are C, DSL, LPG, NNG, OGS, OIL, OOL, PNG, PRG, PRS, R or W.

/236 2 RT 504 PRESENT WITH INCOMPLETE SUPPORTING RTS

The file contains a RT 504 that is not accompanied by all of the required supporting record types: RTs 505, 585, and 587. Please submit your next file with the required number of monitoring plan records.

/237 2 IMPROPER STATUS REPORTED FOR DAILY QA REFERENCE CHECK

The status reported in Record Type 232 (Daily QA Reference Checks for Non-CEMS Parameters) is neither "P" (Pass) or "F" (Fail).

/238 2 IMPROPER STATUS REPORTED FOR OTHER DAILY QA CHECKS

The status reported in Record Type 233 (Other Daily QA Checks) is neither "P" (Pass) or "F" (Fail).

/240 2 FORMULA ID FROM RT 328 DOES NOT CORRESPOND TO RT 520

The formula ID reported in the RT 328 can not be matched to a formula ID for the RT 520, parameter NOXM. A formula must be reported for the NOXM parameter and consistently reported between the hourly and monitoring plan record types.

/241 2 WARNING: CUMULATIVE OZONE SEASON NOX TONS ARE HIGH

The cumulative ozone season NOx tons value reported in RT 307 for this unit/stack is significantly higher than the average for all sources. This warning is intended to help you diagnose a possible reporting problem. If the reported NOx tons value is correct, please disregard this message.

/242 2 FORMULA IN RECORD TYPE 328 OR RECORD TYPE 520 IS BLANK

The formula ID is blank in either the RT 328 or RT 520. Therefore,

the formula ID from the RT 328 and the formula ID for the RT 520, parameter NOXM, cannot be matched. A formula ID must be reported for the NOXM parameter and consistently reported between the hourly and monitoring plan record types.

/250 2 UNIT OPERATING TIME INCONSISTENT WITH NOX RATE EMISSIONS VALUE

The unit operating time reported in RT 300 is inconsistent with the NOx rate emissions rate reported in RT 320. If a positive value is reported for operating time, there must be a positive value reported for the NOx emissions rate. Conversely, if the operating time is zero, no RT 320 must be present in the file for that non-operating hour. (NOTE: Ignore this error message if it was generated during a period when the unit was in start-up or shut-down conditions.)

/251 2 UNIT OPERATING TIME INCONSISTENT WITH SO2 EMISSIONS VALUE

The unit operating time reported in RT 300 is inconsistent with the SO2 emissions value reported in RT 310. If a positive value is reported for operating time, there must be a positive value reported for the SO2 emissions value. Conversely, if the operating time is zero, no SO2 RT 310 must be present in the file for that non-operating hour. (NOTE: Ignore this error message if it was generated during a period when the unit was in start-up or shut-down conditions.)

/252 2 UNIT OPERATING TIME INCONSISTENT WITH CO2 EMISSIONS VALUE

The unit operating time reported in RT 300 is inconsistent with the CO2 emissions value reported in RT 330. If a positive value is reported for operating time, there must be a positive value reported for the CO2 emissions value. Conversely, if the operating time is zero, no CO2 RT 330 must be present in the file for that non-operating hour. (NOTE: Ignore this error message if it was generated during a period when the unit was in start-up or shut-down conditions.)

/253 2 MONITORING SYSTEM IDS FOR RECORD TYPES 302 AND 313 DO NOT MATCH

The monitoring system IDs reported in RT 302 and RT 313 either do not match or are missing from one of the record types. The monitoring system IDs must be the same in both record types. However, if the monitoring system ID is omitted from RT 302 due to substitute data or use of maximum flow rate, it must be omitted from RT 313.

/254 2 MONITORING SYSTEM IDS FOR RECORD TYPES 303 AND 314 DO NOT MATCH

The monitoring system IDs reported in RT 303 and RT 314 either do not match or are missing from one of the record types. The monitoring system IDs must be the same in both record types. However, if the monitoring system ID is omitted from RT 303 due to substitute data, it must be omitted from RT 314.

/300 2 NOX METHODOLOGY NOT REPORTED IN RECORD TYPE 328

A NOx Methodology code was not reported in RT 328. Please submit your next file with the required NOx Methodology code.

/301 2 INAPPROPRIATE NOX METHODOLOGY REPORTED IN RECORD TYPE 328

An inappropriate NOx Methodology code was reported in RT 328. The appropriate NOx Methodology codes are AE-GAS, AE-MIX, AE-MUL, AE-OIL, GDEF-GAS, GDEF-OIL, GDEF-MUL, NOXM-AMS, NOXM-CEMS, NOXM-SUM, NOXR-AMS, NOXR-CEMS, NOXR-BYS, NOXR-BYS-C, UDEF-GAS, UDEF-GAS-C, UDEF-OIL, UDEF-OIL-C, UDEF-MUL, and UDEF-MUL-C. Please submit your next file with the appropriate NOx Methodology code.

/302 2 HEAT INPUT METHODOLOGY NOT REPORTED IN RECORD TYPE 328

No Heat Input Methodology code was reported in RT 328. Please submit your next file with the required Heat Input Methodology code.

/303 2 INAPPROPRIATE HI METHODOLOGY REPORTED IN RECORD TYPE 328

An inappropriate Heat Input Methodology code was reported in RT 328. The appropriate Heat Input Methodology codes are CEMS, ALTHI, ALTHII, AMS, FF-GAS, FF-MIX, FF-OIL, MHHI, and MF-MM. Please submit your next file with the appropriate Heat Input Methodology code.

/304 2 FORMULA ID NOT PRESENT IN RECORD TYPE 328

The Formula ID for total NOx Mass from the monitoring plan records (RT 520) must be present in RT 328. Please submit your next file with the required Formula ID from the Monitoring Plan records.

/305 2 RT 324 MISSING FOR METHODOLOGY CODE "AE-GAS" or "AE-OIL"

In RT 328, column 45 the NOx methodology was Appendix E, but there was no RT 324 for this hour. Please submit your next file with a RT 324 for each hour in which Appendix E is used for NOx mass calculations.

/306 2 RT324 CONTAINS ZERO NOX EMISSION RATE FOR APPENDIX E METHODOLOGY

In RT 324 column 25, the NOx emission rate was blank or zero for an hour in which the NOx Methodology code in RT 328 indicates the use of Appendix E. Please submit your next file with NOx emission rates in each RT 324.

/307 2 INCONSISTENT CODE FOR SINGLE/MULTIPLE FUEL HOUR

RT 324, column 45 did not contain the code of "S" to indicate a single fuel hour. This is inconsistent with the NOx methodology code of "AE-GAS" or "AE-OIL" which was reported in RT 328, column 45. Please submit your next file with the correct indicator of single fuel hours.

/308 2 RT 300 MISSING FOR HOUR IN WHICH TYPE 328 RECORD IS REPORTED

There were no RTs 300 for hours in which an Appendix E NOx methodology was reported in RT 328. Please submit your next file with all required RTs 300.

/309 2 MISSING HEAT INPUT RATE IN RT 300

Heat input rate was not reported in RT 300 for hours in which RT 328 indicated the use of Appendix E for oil or gas. Please submit your next file with all required RTs 300.

/310 2 ZERO UNIT OPERATING TIME IN RT 300

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of Appendix E for oil or gas. Please submit consistent NOx mass emissions and unit operating time information in your next file.

/311 2 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

/312 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 324 was weighted by unit operating time in RT 300 and heat input from RT 300 was used to obtain the recalculated value.

/313 2 TYPE 324 RECORD MISSING FOR METHODOLOGY CODE "AE-MUL"

In RT 328, column 45 the NOx methodology was Appendix E, but there were no RTs 324 for this hour. Please submit your next file with a RT 324 for each fuel and each hour in which Appendix E is used for NOx mass calculations.

/314 2 ONLY ONE TYPE 324 RECORD FOR METHODOLOGY CODE "AE-MUL"

In RT 328, column 45 the NOx methodology was Appendix E for multiple fuels (AE-MUL), but there was only only one RT 324 for the hour. Please submit your next file with all required RTs 324.

/315 2 RT 324 CONTAINS A ZERO OR BLANK NOX EMISSION RATE

In RT 324 column 25 the NOx emission rate was blank or zero for an hour in which the NOx Methodology code in RT 328 indicates the use of Appendix E. Please submit your next file with NOx emission rates in each RT 324.

/316 2 INCONSISTENT CODE FOR SINGLE/MULTIPLE FUEL HOUR

RT 324 column 45 did not contain the code of 'M' to indicate a multiple fuel hour. This is inconsistent with the NOx methodology code of "AE-MUL" reported in RT 328, column 45. Please submit your next file with the correct indicator of multiple fuel hours.

/317 2 RT 324 FOR MULTIPLE FUEL HOURS CONTAIN IDENTICAL SYSTEM ID

For a multiple fuel hour using Appendix E NOx methodology, the same Fuel Flow Monitoring System ID was reported for two or more RTs 324. Unique Fuel Flow Monitoring System IDs in RTs 324 must be reported for each hour. If fuel flow is missing for one type of fuel, it is permissible to use a blank system ID for the RT 324 and its companion RT 302 or RT 303. However, if fuel flow is missing for more than one type of fuel, it is not permissible to have more than one of the RTs 324 and companion fuel flow records contain a blank fuel flow monitoring system ID. Please submit your next file with unique monitoring system IDs for all multiple RTs 324.

/318 2 MISSING RT 302 OR RT 303 FOR HOUR RT 324 IS REPORTED

Corresponding RTs 302 or 303 were not reported for hours in which RT 324 containing NOx emission rate was reported. Please submit your next file with all required hourly fuel flow records.

/319 2 MISSING HEAT INPUT RATE IN RT 302 OR RT 303

Heat input rate was not reported in RT 302 or 303 for hours in which corresponding RTs 324 contained a NOx emission rate. Please submit your next file with complete heat input data in RTs 302 and 303.

/320 2 MISSING FUEL USAGE TIME IN RT 302 OR 303

Fuel usage time was not reported in RT 302 or 303 for hours in which RT 324 contained a NOx emission rate. Please submit your next file with complete fuel usage and information in RTs 302 and 303.

/321 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions in RT 324 do not equal the recalculated NOx mass emissions for that fuel. The hourly value from each RT 324 was weighted by fuel usage time and heat input from its corresponding RT 302 or 303 was used to obtain the recalculated value.

/322 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. The hourly value from each RT 324 was weighted by fuel usage time and heat input from its corresponding RT 302 or 303 was used to do the recalculation. The NOx mass from all RTs 324 were summed to obtain the recalculated value.

/323 2 MISSING RT 531 FOR GENERIC DEFAULT RATE FOR GAS

A NOx methodology of "GDEF-GAS" in RT 328, column 45 was reported but there was no effective RT 531 containing a generic default NOx emission rate for gas in EPA's monitoring plan database.

/324 2 MISSING RT 531 FOR MAXIMUM HEAT INPUT

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for gas or a non-specific fuel in EPA's monitoring plan database.

/325 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the gas default NOx emission rate in RT 531 and maximum heat input in RT 531 weighted by unit operating time reported in RT 328.

/326 2 MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED

There were no RTs 300 for hours in which the NOx methodology of "GDEF-GAS" was reported in RT 328. Please submit your next file with all required RTs 300.

/327 2 MISSING HEAT INPUT RATE IN RT 300

Heat input rate was not reported in RT 300 for hours for which the NOx methodology of "GDEF-GAS" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

/328 2 ZERO UNIT OPERATING TIME IN RT 300

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of , NOx methodology of "GDEF-GAS". Please submit consistent NOx mass emissions and unit operating time information in your next file.

/329 2 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

/330 2 REPORTED HOURLY NOX MASS NOT TO EQUAL RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated using the unit operating time in RT 300, the gas default NOx emission rate in RT 531 and the hourly heat input in RT 300.

/331 2 MISSING RT 531 FOR GENERIC DEFAULT RATE FOR OIL

A NOx methodology of "GDEF-OIL" in RT 328, column 45 was reported but there was no effective RT 531 containing a generic default NOx emission rate for oil in EPA's monitoring plan database.

/332 2 MISSING RT 531 FOR MAXIMUM HEAT INPUT

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for oil or a non-specific fuel in EPA's monitoring plan database.

/333 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the oil default NOx emission rate in RT 531 and maximum heat input in RT 531 weighted by unit operating time reported in RT 328.

/334 2 MISSING RT 300 FOR HOUR IN WHICH RT 328 RECORD IS REPORTED

There were no RTs 300 for hours in which the NOx methodology of "GDEF-OIL" was reported in RT 328. Please submit your next file with all required RTs 300.

/335 2 MISSING HEAT INPUT RATE IN RT 300

Heat input rate was not reported in RT 300 for hours for which the NOx methodology of "GDEF-OIL" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

/336 2 ZERO UNIT OPERATING TIME IN RT 300

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "GDEF-OIL". Please submit consistent NOx mass emissions and unit operating time information in your next file.

/337 2 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

/338 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated using the unit operating time in RT 300, the oil default NOx emission rate in RT 531 and the hourly heat input in RT 300.

/339 2 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR OIL

A NOx methodology of "UDEF-OIL" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for oil in EPA's monitoring plan database.

/340 2 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR OIL

A NOx methodology of "UDEF-OIL-C" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for oil for controlled hours in EPA's monitoring plan database.

/341 2 MISSING RT 531 FOR MAXIMUM HEAT INPUT

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for oil or a non-specific fuel in EPA's monitoring plan database.

/342 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the oil default NOx emission rate and maximum heat input weighted by unit operating time reported in RT 328.

/343 2 MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED

There were no RTs 300 for hours in which the NOx methodology of "UDEF-OIL" or "UDEF-OIL-C" was reported in RT 328. Please submit your next file with all required RTs 300.

/344 2 MISSING HEAT INPUT RATE IN RT 300

Heat input rate was not reported in RT 300 for hours in which the NOx methodology of "UDEF-OIL" or UDEF-OIL-C was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating

hours.

/345 2 ZERO UNIT OPERATING TIME IN RT 300

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "UDEF-OIL" or "UDEF-OIL-C". Please submit consistent NOx mass emissions and unit operating time information in your next file.

/346 2 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

/347 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was weighted by the unit operating time in RT 300 and recalculated from the oil default NOx emission rate in RT 531 and the hourly heat input in RT 300.

/348 2 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR GAS

A NOx methodology of "UDEF-GAS" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for gas in EPA's monitoring plan database.

/349 2 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR GAS

A NOx methodology of "UDEF-GAS-C" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for gas for controlled hours in EPA's monitoring plan database.

/350 2 MISSING RT 531 FOR MAXIMUM HEAT INPUT

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for gas or a non-specific fuel in EPA's monitoring plan database.

/351 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the gas default NOx emission rate and maximum heat input and weighted by unit operating time reported in RT 328.

/352 2 MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED

There were no RTs 300 for hours in which the NOx methodology of "UDEF-GAS" or "UDEF-GAS-C" was reported in RT 328. Please submit your next file with all required RTs 300.

/353 2 MISSING HEAT INPUT RATE IN RT 300

Heat input rate was not reported in RT 300 for hours in which the NOx methodology of "UDEF-GAS" or "UDEF-GAS-C" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

/354 2 ZERO UNIT OPERATING TIME IN RT 300

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "UDEF-GAS" or "UDEF-GAS-C". Please submit consistent NOx mass emissions and unit operating time information in your next file.

/355 2 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

/356 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was weighted by the unit operating time in RT 300 and recalculated from the gas default NOx emission rate in RT 531 and the hourly heat input in RT 300.

/357 2 MISSING RT 531 FOR NOX EMISSION RATE

A NOx methodology of "NOXR-BYS" in RT 328, column 45 was reported but there was no effective RT 531 containing a default NOx emission rate in EPA's monitoring plan database.

/358 2 MISSING RT 531 FOR MAXIMUM HEAT INPUT

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for oil or a non-specific fuel in EPA's monitoring plan database.

/359 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the default NOx emission rate and maximum heat input weighted by unit operating time reported in RT 328.

/360 2 MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED

There were no RTs 300 for hours in which the NOx methodology of "NOXR-BYS" was reported in RT 328. Please submit your next file with all required RTs 300.

/361 2 MISSING HEAT INPUT RATE IN RT 300

Heat input rate was not reported in RT 300 for hours in which the NOx methodology of "NOXR-BYS" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

/362 2 ZERO UNIT OPERATING TIME IN RT 300

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "NOXR-BYS". Please submit consistent NOx mass emissions and unit operating time information in your next file.

/363 2 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

/364 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was weighted by the unit operating time in RT 300 and recalculated from the oil default NOx emission rate in RT 531 and the hourly heat input in RT 300.

/365 2 MISSING RT 320 FOR HOUR IN WHICH NOX METHODOLOGY IN RT 328 IS CEMS

A NOx methodology of "NOXR-CEMS" was reported in RT 328, column 45, but there was no corresponding RT 320 containing NOx emission rate. Please submit your next file with all required RTs 320.

/366 2 NOX EMISSION RATE OF ZERO IN RT 320 FOR HOUR

A NOx methodology of "NOXR-CEMS" was reported in RT 328, column 45, but the Adjusted NOx emission rate in RT 320, column 42, for this hour is blank or zero. Please submit your next file with NOx emission rate in each RT 320.

/367 2 MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED

There were no RTs 300 for hours in which the NOx methodology of "NOXR-CEMS" was reported in RT 328. Please submit your next file with all required RTs 300.

/368 2 MISSING HEAT INPUT RATE IN RT 300

Heat input rate was not reported in RT 300 for hours in which the NOx methodology of "NOXR-CEMS" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

/369 2 ZERO UNIT OPERATING TIME IN RT 300

The unit operating time reported in RT 300, column 18 indicated that the unit/stack did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "NOXR-CEMS". Please submit consistent NOx mass emissions and unit operating time information in your next file.

/370 2 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328

The unit/stack operating time reported in RT 328, column 18 is inconsistent with the unit/stack operating time reported in RT 300, column 18. Please

submit consistent unit operating time information in your next file.

/371 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 320 was weighted by unit operating time and heat input from RT 300 to obtain the recalculated value.

/372 2 MISSING TYPE 201 RECORD

A NOx methodology of "NOXM-CEMS" was reported in RT 328, column 45, but there was no corresponding RT 201 containing NOx concentration for the hour. Please submit your next file with all required RTs 201.

/373 2 NOX CONCENTRATION RATE OF BLANK OR ZERO IN RT 201

A NOx methodology of "NOXM-CEMS" was reported in RT 328, column 45, but the Adjusted NOx concentration rate in RT 201, column 32 for this hour is blank or zero. Please submit your next file with complete RTs 201.

/374 2 MISSING CODE IN RT 220

A NOx methodology of "NOXM-CEMS" was reported in RT 328, column 45, but there was no corresponding RT 220 containing volumetric flow rate. Please submit your next file with all required RTs 220.

/375 2 VOLUMETRIC FLOW RATE OF ZERO IN RT 220

A NOx methodology of "NOXM-CEMS" was reported in RT 328, column 45, but the Adjusted volumetric flow rate in RT 220, column 39, for this hour is contains an Adjusted volumetric flow rate in column 39 of blank or zero. Please submit your next file with complete RTs 220.

/376 2 FORMULA IN RT 328 NOT FOUND IN MONITORING PLAN DATABASE

A formula ID was reported in RT 328, column 42, which was not found in EPA's monitoring plan database.

/377 2 FORMULA CODE ASSOCIATED WITH FORMULA ID REPORTED IN RT 328 INCORRECT

The formula code in RT 520 for the formula ID reported in RT 328 is not appropriate for the calculation of hourly NOx mass emissions using the "NOXM-CEMS" methodology. The formula code for this methodology must be either "N-1" or "N-2".

/378 2 MISSING HOURLY MOISTURE VALUES FOR NOX MASS EMISSIONS CALCULATIONS

A NOx methodology code of "NOXM-CEMS" was reported in RT 328. This RT 328 contained a formula ID representing an "N-2" formula which requires hourly moisture. Neither hourly moisture or a default moisture value was reported for this hour.

/379 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. The hourly value in RT 328 was the

recalculated from the NOx concentration in RT 201 and stack flow in RT 220, weighted by unit operating time in RT 328.

/380 2 MISSING TYPE 323 RECORD

A NOx methodology of "AE-MIX" was reported in RT 328, column 45, but there was no corresponding RT 323 containing NOx emission rate. Please submit your next file with all required RTs 323.

/381 2 NOX EMISSION RATE OF ZERO IN RT 323

A NOx methodology of "AE-MIX" was reported in RT 328 but the Adjusted NOx emission rate in RT 323, column 22 for this hour is blank or zero. Please submit your next file with complete RTs 323.

/382 2 MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED

There were no RTs 300 for hours in which the NOx methodology of "AE-MIX" was reported in RT 328. Please submit your next file with all required RTs 300.

/383 2 MISSING HEAT INPUT RATE IN RT 300 RECORD FOR HOUR

Heat input rate was not reported in RT 300 for hours in which the NOx methodology of "AE-MIX" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

/384 2 ZERO UNIT OPERATING TIME IN RT 300

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "AE-MIX". Please submit consistent NOx mass emissions and unit operating time information in your next file.

/385 2 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

/386 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value was recalculated using the RT 323 NOx rate, the unit operating time and heat input from RT 300.

/387 2 MISSING RT 531 FOR GENERIC DEFAULT RATE FOR OIL

A NOx methodology of "GDEF-MUL" in RT 328, column 45 was reported but there was no effective RT 531 containing a generic default NOx emission rate for oil in EPA's monitoring plan database.

/388 2 MISSING RT 531 FOR GENERIC DEFAULT RATE FOR GAS

A NOx methodology of "GDEF-MUL" in RT 328, column 45 was reported but there was no RT 531 containing a generic default NOx emission rate for gas in

EPA's monitoring plan database.

/389 2 MISSING RT 302 OR 303 FOR UNIT-SPECIFIC DEFAULTS FOR MULTIPLE FUELS

There were no RTs 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOX mass emissions in RT 328. Please submit your next file with all required hourly fuel flow records.

/390 2 MISSING HEAT INPUT RATE IN RT 302 OR RT 303

Heat input rate was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOX mass emissions in RT 328. Please submit your next file with complete heat input data in RTs 302 and 303.

/391 2 MISSING FUEL USAGE TIME IN RT 302 OR RT 303

Fuel usage time was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOX mass emissions in RT 328. Please submit your next file with complete fuel usage and information RTs 302 and 303.

/392 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value was calculated by summing the NOx mass values calculated from the heat input and fuel usage time in RTs 302 and 303 and the applicable unit-specific default NOx emission rate.

/393 2 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR OIL

A NOx methodology of "UDEF-MUL" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for oil in EPA's monitoring plan database.

/394 2 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR GAS

A NOx methodology of "UDEF-MUL" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for gas in EPA's monitoring plan database.

/395 2 MISSING RT 302 OR RT 303 FOR HOUR FOR UNIT-SPECIFIC DEFAULTS

There were no RTs 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOX mass emissions in RT 328. Please submit your next file with all required hourly fuel flow records.

/396 2 MISSING HEAT INPUT RATE IN RT 302 OR RT 303

Heat input rate was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOX mass emissions in RT 328. Please submit your next file with complete heat input data in RTs 302 and 303.

/397 2 MISSING FUEL USAGE TIME IN RT 302 OR RT 303

Fuel usage time was not reported in RT 302 or 303 for hours in which unit-specific defaults for multiple fuels were used to report NOX mass emissions in RT 328. Please submit your next file with complete fuel usage and information RTs 302 and 303.

/398 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value was calculated by summing the NOx mass values calculated from the heat input and fuel usage time in RTs 302 and 303 and the applicable unit-specific default NOx emission rate.

/399 2 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR OIL

A NOx methodology of "UDEF-MUL-C" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for oil in EPA's monitoring plan database.

/400 2 MISSING RT 531 FOR UNIT-SPECIFIC DEFAULT RATE FOR GAS

A NOx methodology of "UDEF-MUL-C" in RT 328, column 45 was reported but there was no effective RT 531 containing a unit-specific default NOx emission rate for gas in EPA's monitoring plan database.

/401 2 MISSING RT 302 OR RT 303 FOR UNIT-SPECIFIC DEFAULTS FOR MULTIPLE FUELS

There were no RTs 302 or 303 for hours in which unit-specific defaults for multiple fuels during controlled hours were used to report NOX mass emissions in RT 328. Please submit your next file with all required hourly fuel flow records.

/402 2 MISSING HEAT INPUT RATE IN RT 302 OR RT 303

Heat input rate was not reported in RT 302 or 303 for hours in which unitspecific defaults for multiple fuels during controlled hours were used to report NOX mass emissions in RT 328. Please submit your next file with complete heat input data in RTs 302 and 303.

/403 2 MISSING FUEL USAGE TIME IN RT 302 OR RT 303

Fuel usage time was not reported in RT 302 or 303 for hours in which unitspecific defaults for multiple fuels during controlled hours were used to report NOX mass emissions in RT 328. Please submit your next file with complete fuel usage and information RTs 302 and 303.

/404 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value was calculated by summing the NOx mass values calculated from the heat input and fuel usage time in RTs 302 and 303 and the applicable unit-specific default NOx emission rate.

/405 2 MISSING RT 531 FOR NOX EMISSION RATE FOR CONTROLLED HOURS

A NOx methodology of "NOXR-BYS-C" in RT 328, column 45 was reported but

there was no effective RT 531 containing a default NOx emission rate in EPA's monitoring plan database.

/406 2 MISSING RT 531 FOR MAXIMUM HEAT INPUT

A heat input methodology of "MHHI" in RT 328, column 55 was reported but there was no effective RT 531 containing a maximum heat input rate for oil or a non-specific fuel in EPA's monitoring plan database.

/407 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was recalculated from the default NOx emission rate and maximum heat input weighted by unit operating time reported in RT 328.

/408 2 MISSING RT 300 FOR HOUR IN WHICH RT 328 IS REPORTED

There were no RTs 300 for hours in which the NOx methodology of "NOXR-BYS-C" was reported in RT 328.

/409 2 MISSING HEAT INPUT RATE IN RT 300

Heat input rate was not reported in RT 300 for hours in which the NOx methodology of "NOXR-BYS-C" was reported in RT 328. Please submit your next file with heat input rate in all RTs 300 for operating hours.

/410 2 ZERO UNIT OPERATING TIME IN RT 300

The unit operating time reported in RT 300, column 18 indicated that the unit/pipe did not operate for an hour in which the RT 328 indicates the use of the NOx methodology of "NOXR-BYS-C". Please submit consistent NOx mass emissions and unit operating time information in your next file.

/411 2 INCONSISTENT UNIT OPERATING TIME IN RT 300 AND RT 328

The unit operating time reported in RT 328, column 18 is inconsistent with the unit operating time reported in RT 300, column 18. Please submit consistent unit operating time information in your next file.

/412 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. Each hourly value from RT 328 was weighted by the unit operating time in RT 300 and recalculated from the oil default NOx emission rate in RT 531 and the hourly heat input in RT 300.

/413 2 NO MULTIPLE STACKS IDENTIFIED IN RT 503 FOR UNIT REPORTING "NOXM-SUM"

A NOx methodology of "NOXM-SUM" was reported in RT 328 for this unit which indicates that the unit value is the sum of the multiple stack NOx mass emissions for the hour. However, there are no active multiple stacks associated with this unit in EPA's monitoring plan database.

/414 2 MISSING MULTIPLE STACK TYPE 328 RECORDS FOR HOUR

A NOx methodology of "NOXM-SUM" was reported in RT 328 for this unit which

indicates that the unit value is the sum of the multiple stack NOx mass emissions for the hour. However, there were no RTs 328 present in the file for any associated multiple stacks. Please submit NOx mass emissions data for multiple stacks in your next file.

/415 2 REPORTED HOURLY NOX MASS NOT EQUAL TO RECALCULATED NOX MASS

The Total NOx mass emissions for the hour in RT 328, column 32 do not equal the recalculated NOx mass emissions. When column 32 of RT 328 for the unit is summed and compared with the sum of column 32 of RT 328 of all multiple stacks the values do not equal.

/500 1 FILE IS UNREADABLE BASED ON EDR FORMAT REQUIREMENTS

The ETS software cannot process this quarterly report file due to file formatting problems. Possible causes include a corrupted or blank data file, an invalid file type, or unreadable data detected at the beginning of a data record.

Please correct the file and resubmit it before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Designated Representative regarding this file (potentially any submitters).

/501 1 ORISPL IN FILENAME IS DIFFERENT FROM ORISPL IN RT 100

This file may contain information for the wrong plant. The ORISPL contained in the mainframe filename assigned to your file (by you or EPA) and the ORISPL reported in Record Type 100 do not match.

Please correct the filename and/or RT 100 as appropriate and resubmit this file before the file submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/502 1 ORISPL NUMBER NOT FOUND IN EPA'S LIST OF VALID ORISPL NUMBERS

The ORISPL reported in Record Type 100 of this file is unknown to EPA. Verify that your file contains the correct ORISPL. In some cases this situation can occur for new sources that are reporting to EPA for the first time; the ORISPL may not have been added to EPA's mainframe database.

Please resubmit this file with the correct ORISPL before the file submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/503 1 UNIT/STACK ID IS INVALID FOR THIS PLANT

The file contains information for a unit or stack ID unknown to EPA. Ensure unit IDs match those contained in NADB, or that all reported unit, stack and pipe IDs match those defined in the Monitoring Plan, including any required prefix for the stack and pipe IDs (CS, MS, MP, or CP). Check that all IDs are left-justified (review the ORISPL/UNIT ID column presented above).

Please resubmit this file with the correct unit/stack/pipe IDs before the file submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/504 1 YEAR OR QUARTER IN FILENAME IS DIFFERENT FROM RT 100

This file may contain information for the wrong year and/or quarter. The quarter and/or year in the mainframe filename assigned to your file (by you or EPA) and the year and/or filename reported in RT 100 do not match.

Please correct the filename and/or RT 100 as appropriate and resubmit the file before the file submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/505 1 FILE DOES NOT CONTAIN MINIMUM REQUIRED MONITORING PLAN DATA

This file does not contain either a Record Type 502 or 504 to identify the unit(s) for which data are reported in the file. Please resubmit this file with all required monitoring plan record types before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/506 1 DATA FILE CONTAINS INVALID CHARACTERS

This file contains one or more non-ASCII characters, beginning at the location specified below. Note that record types 520, 550, 555, 800-899, 900/901/910, 920 and 930/931/999 are excluded from this check. Ensure the entire file is in ASCII format and resubmit it before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/507 1 FILE CONTAINS UNKNOWN RECORD TYPES

One or more records do not contain a valid three-digit record type code. This problem may be caused by line-wrap of long record types (RT301, for example) or corrupted records.

Please resubmit this file absent the unknown record types before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Designated Representative regarding this file (potentially any submitters).

/508 1 FILE CONTAINS MULTIPLE RECORD TYPE 100s

Each quarterly report must contain only one Record Type 100. Note that the EPA will reject submissions containing multiple unrelated units in a single file.

Please resubmit this file with only one facility data record (Record Type 100). If multiple RT 100s are present because two or more unrelated units (or stacks) are contained in the file,

separate them into individual files with an appropriate RT 100 and submit them before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/509 1 FIRST RECORD IN FILE IS NOT RECORD TYPE 100

The first record in this file does not contain facility identification data (Record Type 100).

Ensure the first record in the file contains the facility data (Record Type 100) and resubmit before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/510 1 FILE DOES NOT CONTAIN A RECORD TYPE 100

This file must contain one facility identification record (Record Type 100).

Please ensure the first record in the file contains the facility data (Record Type 100) and resubmit before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/511 1 FILE DOES NOT CONTAIN A RECORD TYPE 301

This file must contain quarterly cumulative emissions data (Record Type 301) for each stack and unit.

Please ensure the file contains a quarterly cumulative emissions data record (Record Type 301) and resubmit before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/512 2 FILE CONTAINS ONE OR MORE BLANK LINES

This file contains blank lines. Please submit your next file without blank lines.

/513 2 FILE CONTAINS CEMS DATA BUT NO QUALITY ASSURANCE DATA

This file contains CEMS data (Record Type 200, 201, 202, 210 and/or 211) with no associated CEMS quality assurance test data and results (Record Type 6xx).

Please submit your next file with both the CEMS data and quality assurance test data and results. If you were unable to conduct the tests during this quarter, please describe the circumstances in a statement accompanying your quarterly report certification.

/514 2 TOTAL NUMBER OF TYPE 200, 220, AND 310 RECORDS IS INCONSISTENT

This file contains an unequal number of SO2 concentration records

(RT 200), flow records (RT 220) and SO2 mass emissions records (RT 310). If a CEMS unit combusting only natural gas used formula F-23 to calculate SO2 reported in RT 310 for gas-only hours (RT 310 and RT 220 are reported for those hours, but no RT 200), disregard this message.

Please submit your next file with an equal amount of these record types.

/515 2 NUMBER OF TYPE 202 AND 330 RECORDS IS INCONSISTENT

This file contains more CO2 concentration data records (Record Type 202) than CO2 mass emissions data records (Record Type 330). Please submit your next file so that the number of RT 202 equals the number of RT 330 (Exception: if Appendix G missing data procedures were used the number of RT 202 may be less than the number of RT 330).

/516 2 NUMBER OF TYPE 201 AND 320 RECORDS IS INCONSISTENT

This file contains fewer NOx emissions rate data records (Record Type 320) than NOx concentration data records (Record Type 201).

Please submit your next file so that the number of Record Type 320s is greater than or equal to the number of Record Type 201s.

/517 2 NUMBER OF TYPE 302 AND 313 RECORDS IS NOT EQUAL

This file contains an unequal number of oil fuel flow records (Record Type 302) and oil SO2 mass emissions records (Record Type 313).

Please submit your next file with an equal number of these record types.

/518 2 NUMBER OF TYPE 303 AND 314 RECORDS IS NOT EQUAL

This file contains an unequal number of gas fuel flow records (Record Type 303) and gas SO2 mass emissions records (Record Type 314).

Please submit your next file with an equal number of these record types.

/519 2 FILE CONTAINS INSUFFICIENT DAILY CALIBRATION DATA

This file contains an insufficient number of daily calibration data records (Record Type 230).

Please submit your next file with the required number of daily calibration data records.

/520 2 FILE CONTAINS INSUFFICIENT FLOW INTERFERENCE CHECK DATA

This file contains an insufficient number of flow interference data records (Record Type 231).

Please submit your next file with the required number of flow interference data records.

/521 2 FILE CONTAINS AN INVALID NUMBER OF RECORD TYPE 300

The number of hourly operating data records (Record Type 300) reported in the file for each stack and unit does not equal the number of clock hours in the quarter.

Please submit your next file so the number of Record Type 300 reported for each stack and unit is equal to the clock hours for the quarter.

/522 2 FILE CONTENTS INDICATE UNIT/STACK/PIPE DID NOT OPERATE

The file does not contain data indicating that the unit/stack/pipe operated during the quarter.

This file contains only facility data (Record Type 100), quarterly cumulative emissions data (Record Type 301) and/or reporting period and cumulative ozone season data (Record Type 307), and possibly Record Type 101, Record Type 102, monitoring plan information (Record Type 5xx) and/or signature and certification statement records (Record Type 900/901 and/or 930/931).

Based on this file content, the EPA believes this file represents a non-operating unit, stack or pipe. If this is not the case, you should examine your file, correct any problems, and resubmit the file.

/523 1 UNIT/STACK ID IN FILENAME NOT FOUND IN DATA FILE

This file may contain information for the wrong stack/unit ID. The stack/unit ID in the mainframe filename assigned to your file (by you or EPA) does not match any unit/stack ID reported in the file.

Please correct the filename and/or unit/stack ID as appropriate and resubmit this file before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/524 1 DATA REPORTED FOR UNIT/STACK ID NOT DEFINED IN RT 502-504

This file contains one or more records for a Unit/Stack/Pipe ID that was not identified in the monitoring plan Table A records (Record Types 502-504). Ensure that the file contains all required RT 502-504. Also, ensure that all reported IDs are correct, as an invalid ID may also cause this problem (review the ORISPL/UNIT ID column presented above).

Please correct the Unit/Stack/Pipe IDs and/or ensure the file contains all required Record Types 502-504. Resubmit this file before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/525 1 NO DATA REPORTED FOR UNIT/STACK ID DEFINED IN RT 502-504

This file does not contain emissions or QA data for a Unit/Stack/Pipe

defined in the monitoring plan Table A records (Record Types 502-504). Every Unit/Stack/Pipe defined in the file must have at least a summary emissions record (RT 301) reported for it. Ensure that all IDs reported in the file are correct, as an invalid ID may also cause this problem (review the ORISPL/UNIT ID column presented above).

Please ensure that all required types are reported for each Unit/ Stack/Pipe ID in the file and/or correct any invalid IDs as appropriate. Resubmit this file before the submission deadline (for electronic submitters) or by the date indicated in the letter EPA sent to your Certifying Official regarding this file (potentially any submitters).

/526 2 FILE DOES NOT CONTAIN A RECORD TYPE 102

All NOx Budget Plan files must contain a Record Type 102.

Please ensure that the next file submitted contains the facility location and identification information record (RT 102).

/527 2 FILE DOES NOT CONTAIN A RECORD TYPE 505

All NOx Budget Plan files must contain a Record Type 505.

Please ensure that the next file submitted contains the program indicator for report record (RT 505).

/528 2 RECORD TYPE 520 DOES NOT INDICATE NOXM OR NOXR AS PARAMETER MONITORED

Each NOx Budget Program file must contain a RT 520 that indicates NOXM or NOXR in column 14 as the parameter monitored.

Please ensure that the next file submitted contains the necessary parameter monitored in the formula table information (RT 520).

/529 2 FILE DOES NOT CONTAIN BOTH RECORD TYPES 930 AND 931

A NOx Budget Program Certification Statement and Authorized Account Representative Signature and General Certification Statement (RTs 930 and 931) must be present in the file. Please ensure that the next file submitted contains both of these record types.

/530 2 MISSING OR INVALID EDR VERSION IN RECORD TYPE 100

There was no EDR version reported in RT 100 or the EDR version contained in RT 100 was invalid. Column 15 must contain one of the following valid EDR versions: V1.3B, or V2.0.

/531 2 HOURLY NOX MASS EMISSION DATA NOT PRESENT IN FILE

NOx mass emission data records (RT 328) are not present in the file. Please ensure that the next file submitted contains hourly NOx emission data.

/532 2 FILE CONTENTS INDICATE UNIT DID NOT OPERATE DURING QUARTER

The file does not contain data indicating that the unit/stack/pipe operated during the quarter.

This file contains facility data (Record Type 100s), unit operating parameters (Record Type 300) with no hourly data, quarterly cumulative emissions data (Record Type 301) and/or reporting period and cumulative ozone season data (Record Type 307), and possibly Record Type 101, Record Type 102, monitoring plan information (Record Type 5xx) and/or signature and certification statement records (Record Type 900/901 and/or 930/931).

Based on this file content, the EPA believes this file represents a non-operating unit, stack or pipe. If this is not the case, you should examine your file, correct any problems, and resubmit the file.